#### REMARKS

### Status of the claims

Claims 14-26 are pending in this application. Claims 1-13 have been canceled. Claims 14-26 have been added. New claims 14-26 correspond to deleted claims 1-13. The additional subject matter of claim 14 is supported by the specification at page 4, lines 26 and 27. Accordingly, no new matter has been added.

### Objection to the Abstract

The Examiner objects to the lack of an Abstract of the Disclosure as required by 37 CFR 1.72(b). Applicants submit herewith on a separate sheet of paper an Abstract of the Disclosure. As such, the objection should be withdrawn.

# Objection to the Drawings and Specification

The Draftsperson objects to the drawings as failing to comply with 37 CFR 1.84(p)(5) for failing to describe the drawings in the specification. Applicants submit herewith an amendment to the specification inserting a section on "Brief Description of the Drawings". As such, the objection should be withdrawn.

# Objection to the Specification-Priority

The Examiner objects to the specification for not reciting that the PCT application claims priority to the Finnish application

No. 980571 filed on March 13, 1998. Applicants submit herewith an amendment to the specification to recite the priority data of the PCT application. As such, the objection should be withdrawn.

### Rejections under 35 USC 112, first paragraph

The Examiner rejects claims 1-2 and 11 as not enabled. Applicants traverse the rejection and respectfully request the withdrawal thereof.

The Examiner contends that the phrase "bacteria are detected from their cultivation medium clearly prior to the peak of the population growth" of claim 1 encompasses any bacteria, which is beyond the scope of the specification.

Applicants amend claim 14 corresponding to claim 1 to delete the offensive phrase and now recite a method for detecting bacteria after the bacteria is cultivated for 3 to 10 hours from the onset of cultivation. As this limitation does not encompass all or any bacteria, Applicants submit that the amendment overcomes the rejection and thus the rejection should be withdrawn.

The Examiner contends that the phrase "the microbial antigens are detected directly after the stationary phase" of claim 2 encompasses any microbial antigen, which is beyond the scope of the specification.

Applicants amend claim 15 corresponding to claim 2 to delete the offensive phrase and now recite a method for detecting bacteria

immunologically. As this limitation does not encompass all or any microbial antigens, Applicants submit that the amendment overcomes the rejection and thus the rejection should be withdrawn.

The Examiner rejects claim 11 for the phrase "the microbes are incubated prior to the immunological detection in their optimal growth temperature". The Examiner contends that this phrase encompasses any and all microbes, which is beyond the scope of the specification.

Applicants submit that the phrase is enabled and that one of ordinary skill in the art would know without undue experimentation the optimal growth temperature of different microbes and bacteria. Such information is available in any textbook of microbiological cultivations. As such, one of ordinary skill in the art would know which bacteria are cultivated at certain optimal temperatures. One of ordinary skill in the art with little (and certainly not undue) to no experimentation could determine the optimal temperature for a particular bacteria. As such, the rejection should be withdrawn.

The Examiner also expressed concern over Example 4 in the specification as not providing plating and optimal media conditions. Applicants further submit that one of ordinary skill in the art would know or could easily determine from textbooks and the like the optimal plating and media conditions for Salmonella.

## Rejections under 35 USC 112, second paragraph

The Examiner rejects claims 1 and 2 as indefinite for reciting the phrases "clearly prior to the peak of population growth" in claim 1 and "directly after the stationary phase" in claim 2. Applicants traverse the rejection and respectfully request the withdrawal thereof.

Applicants amend claims 14 and 15 corresponding to claims 1 and 2 to delete the offensive phrases as noted above. As such, the rejection should be withdrawn.

### Rejections under 35 USC 102(b)

The Examiner rejects claim 7 as anticipated by Boyd et al. as Boyd et al. allegedly discloses the sequence of claim 7. Applicants traverse the rejection and respectfully request the withdrawal thereof.

Applicants submit that claim 7 is directed to a method of detecting bacteria by means of antibody detection against a peptide sequence. Applicants submit that only the peptide sequence is disclosed in Boyd et al. and not the method as recited in claim 7. As all the elements of claim 7 are not disclosed in Boyd et al., claim 7 is not anticipated and the rejection should be withdrawn.

The Examiner rejects claim 7 as anticipated by Rossolini as Rossolini allegedly discloses the sequence of claim 7. Applicants

traverse the rejection and respectfully request the withdrawal thereof.

Applicants submit that claim 7 is directed to a method of detecting bacteria by means of antibody detection against a peptide sequence. Applicants submit that only the peptide sequence is disclosed in Rossolini and not the method as recited in claim 7. As all the elements of claim 7 are not disclosed in Rossolini, claim 7 is not anticipated and the rejection should be withdrawn.

The Examiner rejects claims 1-13 as anticipated by Thorns `241 (USP 5,510,241) and WO `197 (WO 92/06197). Applicants traverse the rejection and respectfully request the withdrawal thereof.

The Examiner contends that Thorns '241 and WO '197 disclose a method for testing the presence of Salmonella species expressing fimbrial antigens, which have been grown on a selected medium.

Applicants submit that the present invention improves the methods of detecting of microbial by increasing the time of detection. The present invention is able to achieve this great phenomena by early detection of surface antigens that are expressed early in the growth phase, when the number of cells and cell structures disturbing the detection is low.

Applicants also submit that Thorns '241 and WO '197 do not achieve this great phenomena. Thorns '241 and WO '197 disclose a necessary cultivation time of 18 hours at 37°C or 38 hours at 22°C. See, column 7, line 67 of Thorns '241. Neither reference discloses

or suggests earlier detection of the surface antigens in a rapid manner with a low concentration of other cell structures with small amounts of cross-reactions with other related bacteria.

For the foregoing reasons, Applicants submit that the present invention is not anticipated by Thorns '241 nor WO '197. As such, the rejection should be withdrawn.

### Conclusion

As Applicants have addressed and overcome all objections and rejections in the Office Action, Applicants respectfully request that the objections and rejections be withdrawn and that the claims be allowed.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Kecia Reynolds (Reg. No. 47,021) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

Pursuant to the provisions of 37 C.F.R. § 1.17 and 1.136(a),

Applicants hereby petition for an extension of three (3) months to

January 5, 2002 for the period in which to file a response to the

Appl. No. 09/646,043

outstanding Office Action. The required fee of \$460.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version with Markings to Show Changes Made

(Rev. 09/26/01)



### VERSION WITH MARKINGS TO SHOW CHANGES MADE

#### IN THE ABSTRACT OF THE DISCLOSURE:

An Abstract of the Disclosure has been added and is attached hereto as a separate page following the last page of this Reply.

#### IN THE SPECIFICATION:

The specification has been amended as follows:

Page 1, line 1

This application is <u>a 35 USC 371</u> [the] national phase [under 35 U.S.C. § 371 of PCT International Application No.] <u>application of PCT/F199/00192</u> [which has an International filing date of] <u>filed on March 15, 1999</u>, [which designated the United States of America] <u>and claims priority to Finnish application No. 980571, filed on March 13, 1998.</u>

A paragraph has been added before the paragraph beginning on page 4, line 8.

#### IN THE CLAIMS:

Claims 1-13 have been canceled.

Claims 14-26 have been added.